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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,016	09/07/2000	Shankar Iyer	UDN0003	1210

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EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/657,016	IYER ET AL.	
	Examiner	Art Unit	
	David E. England	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 15 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 4, 6, 7, 9, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. (6292832) (hereinafter Shah) in view of Rabinovich (6256675).

4. Referencing claim 1, as understood by the Examiner, Shah teaches a process for determining latency between multiple servers and a client across a network in a computer environment, comprising the steps of:

5. receiving a request for latency metrics on a server, (e.g. col. 3, lines 15 – 35);

6. wherein said latency metric request specifies a particular client, (e.g. col. 16, lines 32 – 53 & col. 17, lines 28 – 40);

7. providing a latency management table, (e.g. col. 11, line 52 – col. 12, line 2);

8. wherein said latency management table comprises a list of IP addresses along with corresponding Border Gateway Protocol (BGP) hop counts, dynamic hop counts, and Round Trip Times (RTT), (e.g. col. 8, lines 17 – 30 & col. 13, lines 13 – 33);

9. looking up the latency metric for said client in said latency management table, (e.g. col. 8, line 48 – col. 9, line 5 & col. 15, lines 36 – 56);

10. sending said latency metric to the requesting server, (e.g. col. 8, line 48 – col. 9, line 5);

11. wherein the BGP hop count for said client in said latency management table is used for said latency metric upon an initial request for said client, (e.g. col. 3, lines 24 – 50 & col. 18, line 57 – col. 19, line 14); and

12. wherein the dynamic hop count and RTT data for said client in said latency management table are used for said latency metric for subsequent requests for said client, (e.g. col. 3, lines 24 – 50 & col. 18, line 57 – col. 19, line 14), but Shah does not specifically teach only the BGP hop count for said client in said latency management table is used for said latency metric upon an initial request for said client. Rabinovich teaches only the BGP hop count for said client in said latency management table is used for said latency metric upon an initial request for said client, (e.g., col. 20, lines 10 – 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rabinovich with Shah because if the system is initiating a request with only the BGP hop count stored in a table then it would be obvious to only use the BGP hop count to determine latency because there is no other parameters to utilize in the initial request.

13. Referencing claim 2, as understood by the Examiner, Shah teaches sending periodic latency probes to the IP addresses in said latency management table, (e.g. col. 15, lines 35 – 64 & col. 16, line 42 – col. 17, line 10 & col. 17, line 51 – col. 18, line 17);

14. receiving response packets for said latency probes, (e.g. col. 15, lines 35 – 64 & col. 17, line 51 – col. 18, line 17); and

15. recording the dynamic hop count and latency (RTT) data in said latency management table, (e.g. col. 8, lines 17 – 59 & col. 14, lines 34 – 57).

16. Referencing claim 4, as understood by the Examiner, Shah teaches receiving requests for a content server address from said client, (e.g. col. 2, line 64 – col. 3, line 35 & col. 8, lines 17 – 30 & col. 13, lines 13 – 33);

17. sending a latency metric request to the appropriate servers, (e.g. col. 2, line 64 – col. 3, line 35 & col. 8, lines 17 – 30 & col. 15, lines 36 – 64);

18. receiving latency metric data from said servers, (e.g. col. 8, lines 17 – 30 & col. 13, lines 13 – 33 & col. 15, lines 36 – 64);

19. determining the optimal content server for said client, (e.g. col. 8, line 48 – col. 9, line 5 & col. 15, line 46 – col. 16, line 20); and

20. sending said optimal content server's address to said client, (e.g. col. 8, line 48 – col. 9, line 5).

21. Claims 6, 7, 9, 11, 12 and 14 are rejected for similar reasons stated above.

22. Claims 3, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah and Rabinovich as applied to the claims above, and in view of what is well known in the art.

23. Referencing claim 3, as understood by the Examiner, Shah teaches all that is described above but does not specifically teach periodic latency probes are sent to a higher level server of a client by masking said client's IP address in said latency management table.

24. Examiner takes Official Notice (see MPEP § 2144.03) that " masking said client's IP address " in a computer networking environment was well known in the art at the time the invention was made.

25. It would have been obvious to one of ordinary skill in the art at the time the inventions was made to utilize masking said client's IP address in said latency management table with Shah because this will add security to a network and also in the act of transmitting an IP address. Masking an address allows the users to hide or "mask" parts of the address to hackers or other internet users that might try to find an IP address so to get access to that IP address's device.

26. Claims 8 and 13 are rejected for similar reasons as stated above.

27. Claims 5, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah and Rabinovich as applied to the claims above, and in view of McCanne et al. (6415323) (hereinafter McCanne).

28. As per claim 5, as understood by the Examiner, Shah the Rabinovich teach all that is described above that is in association with claim 5 and also teaches determining step gathers the expected latency metrics and said latency metric data in a weighted combination with the RTT in said latency metric data to determine which latency metric data indicates the optimal content server and dynamic hops, (e.g. col. 9, line 44 – col. 10, line 21). But does not teach using the inverse relationship of hop counts. McCanne teaches using the inverse relationship of hop counts, (e.g. col. 18, lines 35 – 48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCanne with the combine system of Shah and Rabinovich because using an algorithm to find the optimum path for a client would insure that the client utilizes the network to the fullest capability for the fastest delivery of information on the networks.

29. Claims 10 and 15 are rejected for similar reasons as stated above.

Response to Arguments

30. Applicant's arguments with respect to claims 1 – 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England
Examiner
Art Unit 2143

De

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER